

808 NON METALLIC PIPE

808.01 PCC PIPE

(A) NONREINFORCED PCC PIPE. Nonreinforced PCC pipe shall meet the requirements of AASHTO M 86 for the Class of pipe as specified in the Contract.

(B) REINFORCED PCC PIPE. Reinforced PCC pipe shall be of Class B PCC, Class III minimum, Wall B minimum for the diameter(s) specified in the Contract and per AASHTO M170 modified as follows:

PCC mix proportions shall be determined per 817.01(C) prior to production. PCC shall contain a minimum of 564 lbs. cement per cubic yard.

PCC pipe shall be furnished with rubber gasket joints per 808.04.

PCC pipe and joints for sanitary and combined sewers shall pass 13 psi hydrostatic test performed by pipe manufacturer per ASTM C 443, Section 10, and ASTM C 497.

The bevel or drop on bevel pipe shall not exceed the pipe wall thickness.

Except for closure sections and as otherwise specified, PCC pipe shall be furnished in minimum eight (8) foot lengths in sizes 12-inch through 72-inch diameter and minimum six (6) foot lengths in sizes larger than 72-inch diameter.

Branches and specials shall have standard reinforcement deflected to facilitate opening for the branch or special and shall be formed at time of pipe manufacture. Additional reinforcement shall be welded to longitudinal and circumferential steel where deflection or opening results in bar spacing in excess of one and one half times the wall thickness. The design and fabrication plan for branches and specials shall be submitted for approval prior to manufacture.

Pipe 12-inch through 72-inch diameter will be accepted from a manufacturer's existing stock provided crushing strength tests meet AASHTO M170 requirements and, for sanitary and combined sewer, the pipe meets hydrostatic test requirements. Crushing tests shall be performed under the supervision of a District inspector on the manufacturer's testing machine.

Pipe 78-inch diameter and larger will be accepted based on tests of quality of the PCC as placed in the pipe and by examination of the quality, amount, and accuracy of placement of the steel reinforcement per AASHTO M170 requirements and, for sanitary and combined sewer, the pipe meets hydrostatic test requirements.

808.02 POLYVINYL CHLORIDE (PVC) PIPE

(A) PVC PIPE. Polyvinyl chloride (PVC) pipe and fittings shall be per ASTM D 3034 SDR 35 for pipe up to 15-inches diameter, and ASTM F 679 and wall thickness T-1 for pipe 18 thru 27-inches diameter. Unless otherwise approved, lengths of pipe sections shall not exceed 13 feet and lengths of Y-branches shall not exceed three (3) feet. Saddle Y-branches shall not be used.

Joints for both the pipe and fittings shall be of the integral bell type with integral wall section per ASTM D 3212. Solid cross section elastomeric gasket seal shall be per ASTM F 477, factory assembled and securely locked or cemented in the socket.

All pipe and fittings furnished shall be accompanied by a certification, per ASTM D 3034, which will be the basis of acceptance of the material. Pipe and fittings will be inspected upon delivery. Rejected pipe and fitting shall be removed by the Contractor.

(B) PVC PERFORATED PIPE. Perforated PVC pipe and fittings shall meet the requirements of ASTM D 2729 with a dimension ratio (DR) of 35. Unless otherwise approved, lengths of pipe sections shall not exceed 13 feet and lengths of Y-branches shall not exceed three (3) feet. Saddle Y-branches shall not be used.

808.03 CLAY PIPE

Clay pipe shall meet the requirements of AASHTO M 65 for one of the following Classes as specified:

- (1) Standard Strength
- (2) Extra Strength
- (3) Standard Strength Perforated
- (4) Extra Strength Perforated

808.04 GASKETS

(A) GASKET, REINFORCED PCC PIPE. Rubber gaskets for PCC pipe joints shall be per AASHTO M 198, Type A or Type B.

(B) GASKET, POLYVINYL CHLORIDE TYPE. Elastomeric gasket seals for PVC pipe joints shall be manufactured per requirements of ASTM D 3212 or D 1869.